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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,437	12/28/2001	Keith A. Riha	TRM TR000024 DIV	9561
32047	7590	12/30/2005	EXAMINER	
GROSSMAN, TUCKER, PERREAULT & PFLEGER, PLLC 55 SOUTH COMMERICAL STREET MANCHESTER, NH 03101			STAICOVICI, STEFAN	
			ART UNIT	PAPER NUMBER
			1732	

DATE MAILED: 12/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/033,437	RIHA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Stefan Staicovici	1732	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 October 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's response filed October 17, 2005 has been entered. Claim 1 is pending in the instant application.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Filion *et al.* (US Patent No. 5,952,630) in view of Feng *et al.* (US Patent No. 6,627,299 B1).

Filion *et al.* ('630) teach the basic claimed process including, providing a flexible (deformable) thermoplastic PVC (polymer) outer skin (26b') (see col. 3, line 63) formed by vacuum forming (thermoforming) (col. 5, lines 56-57), a foam layer (26b'') bonded to said skin, a substrate layer (22b) bonded to said foam layer (26b'') and at least one switch (30b) embedded in said foam layer (26b'') that is force activated (see Figure 5 and, col. 3, lines 60-64; col. 5, lines 31-34 and lines 54-61; col. 6, lines 20-21). Further, Filion *et al.* ('630) specifically teach that *any* (emphasis added) suitable foam material may be used as taught in U.S. Patent No. 5,232,957, which is incorporated by reference (col. 6, lines 1-7), and as such, under MPEP §2163.07, Filion

*et al.* ('630) teach a polyurethane foam. Furthermore, Filion *et al.* ('630) teach marking of said outer skin layer (see Figure 1).

Regarding claim 1, although Filion *et al.* ('630) teaches marking of said outer skin layer (see Figure 1), Filion *et al.* ('630) do not teach a process of marking said outer skin layer using a laser. However, laser marking a thermoplastic material is well known as evidenced by Feng *et al.* ('299) who teach in general using a laser beam to form a light, dark or colored laser mark on a thermoplastic material, such as PVC (see col. 1, lines 38-41) and specifically, forming a dark mark on a lighter background or a light mark on a dark background (see col.1, lines 10-58). Therefore, it would have been obvious for one of ordinary skill in the art to have used a laser beam as taught by Feng *et al.* ('299) to mark the PVC material in the process of Filion *et al.* ('630) because, Feng *et al.* ('299) teach that laser marking is well known for quickly and cleanly inscribe thermoplastic materials such as PVC which is the thermoplastic material of Filion *et al.* ('630), hence providing for an improved process.

### ***Response to Arguments***

1. Applicant's arguments filed October 17, 2005 have been considered.
2. Applicant argues that although "Feng et al. disclose laser marking on a thermoplastic, it is not believed reasonable to conclude that Feng et al teach or suggest that laser marking may successfully be applied to a skin that overlies a switch such that a force may be continued to be applied to the skin to actuate the switch" because of "rapid heat production" which in

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Applicant's view "can lead to thermal degradation and embrittlement" (see page 5 of the response filed 10/17/2005). In response, it is noted that:

(a) One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this case, the teachings of Filion *et al.* ('630) were used to merely show that laser marking a thermoplastic material is well known and as such, it would have been obvious for one of ordinary skill in the art to have used a laser beam as taught by Feng *et al.* ('299) to mark the PVC material in the process of Filion *et al.* ('630) because, Feng *et al.* ('299) teach that laser marking is well known for quickly and cleanly inscribe thermoplastic materials such as PVC which is the thermoplastic material of Filion *et al.* ('630), hence providing for an improved process.

(b) Although in the process of Filion *et al.* ('630) in view of Feng *et al.* ('299) heat is generated in a rapid manner, it is submitted that thermal degradation and embrittlement does not occur to the extent that the teachings of Feng *et al.* ('299) render Filion *et al.* ('630) unsatisfactory for its intended purpose as Applicant suggests. It is noted that under MPEP §2144.08(5)(B), "arguments of counsel cannot take the place of factually supported *objective evidence*. See, e.g., *In re Huang*, 100 F.3d 135, 139-40, 40 USPQ2d 1685, 1689 (Fed. Cir. 1996); *In re De Blauwe*, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984). In order for such an argument to be persuasive, Applicant is required to provide objective evidence that the thermal degradation and embrittlement that Applicant implies to occur in the process of Filion *et al.* ('630) in view of Feng *et al.* ('299) is to the extent that the teachings of Feng *et al.* ('299) render

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Filion *et al.* ('630) unsatisfactory for its intended purpose. Further, it is noted that under MPEP §2143.02, "[T]he prior art can be modified or combined to reject claims as prima facie obvious as long as there is a reasonable expectation of success. In re Merck & Co., Inc., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Hence, "[O]bviousness does not require absolute predictability, however, at least some degree of predictability is required." In this case, Filion *et al.* ('630) teach a PVC material, whereas Feng *et al.* ('299) teach laser marking of a PVC material, hence a reasonable expectation of success exists because both references teach processing of the same material.

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Staicovici, Ph.D. whose telephone number is (571) 272-1208. The examiner can normally be reached on Monday-Friday 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael P. Colaianni, can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stefan Staicovici, PhD



Primary Examiner

12/23/05

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December 23, 2005